INTER-DEVICE COMMUNICATION INTERFACE

Abstract of the Invention

A hardware-to-software compiler is provided
5   that runs an optimization on a circuit implemented in
programmable logic. The optimization allows portions of
the program implemented by the circuit to be executed via
software. A communication interface between the hardware
and software is provided that allows for efficient data
10   flow. A communication channel is provided that can be
effected as bidirectional using a unidirectional
transport medium (e.g., PCI bus). Communication between
devices is done through pop interface buffers and push
interface buffers on either side of the communication
15   channel.